

Recovery Plan Action Status

Plan Name: Recovery Plan for the Oahu Tree Snails of the Genus Achatinella

Plan Status: Final

Plan Date: 30-Jun-92

Lead Agency: USFWS

Lead Office: Pacific Islands Fish And Wildlife Office

(808)

792-9400)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Oahu tree snails (Achatinella spp.)	1	111	Develop methods for cultivation of native fungal foods.	Complete	Prior to FY 1995	Prior to FY 1995	U.S. Fish and Wildlife Service, Ecological Services Division	Management: Propagation, Research: Propagation	Contract, Graduate Student, Species Expert	This action completed. A fungal culture has been successfully grown and used in the captive propagation facility.
Oahu tree snails (Achatinella spp.)	1	112	Experiment with day length to accelerate growth.	Complete	Prior to FY 1995	FY 1995 - FY 1999	U.S. Fish and Wildlife Service, Ecological Services Division	Management: Propagation, Research: Propagation	Contract, Graduate Student, Species Expert	This action completed. A day length pattern has been established and is in use in the captive propagation facility.
Oahu tree snails (Achatinella spp.)	1	12	Establish and maintain facilities for captive propagation	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division	Research: Propagation	Contract, Graduate Student, Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	An attempt to establish two snail houses at Lyon Arboretum were unsuccessful as well as an attempt to establish a captive population at the Honolulu Zoo. Currently, the one successful captive propagation lab is housed at the University of Hawaii, Manoa Campus and houses eight of the listed species.
Oahu tree snails (Achatinella spp.)	1	13	Remove snails from field populations for captive propagation	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division	Management: Propagation, Research: Propagation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	Eight of the listed species are currently in captive propagation.
Oahu tree snails (Achatinella spp.)	1	211	Conduct surveys: Northern Ko'olau range.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	

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Oahu tree snails (Achatinella spp.)	1	212	Conduct surveys: Southern Ko'olau range.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	213	Conduct surveys: Northern Wai'anae range.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	214	Conduct surveys: Southern Wai'anae range.	Complete	Prior to FY 1995	FY 2005	U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	This action completed.
Oahu tree snails (Achatinella spp.)	1	22	Map geographical area occupied by each population	Complete	Prior to FY 1995	FY 2005	U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	All known locations of snail occurrences have been mapped.
Oahu tree snails (Achatinella spp.)	1	311	Assess impact of predatory snails.	Complete	Prior to FY 1995	FY 2005	U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Predation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	This action completed.
Oahu tree snails (Achatinella spp.)	1	312	Conduct research on methods to eliminate predatory snails.	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division	Management: Predator and Competitor Control, Research: Predation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	Barrier methods have been employed such as salt lines and electrical fencing. Other methods such as bait attraction and repellents still require research.
Oahu tree snails (Achatinella spp.)	1	313	Assess impact of predatory rats.	Complete	Prior to FY 1995	Prior to FY 1995	U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Predation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	This action completed.

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Oahu tree snails (Achatinella spp.)	1	314	Assess impact of alien vertebrates responsible for habitat destruction.	Complete	Prior to FY 1995	FY 2005	U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Habitat Requirements, Research: Habitat Status	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	This action is completed.
Oahu tree snails (Achatinella spp.)	1	315	Conduct research on other potential threats.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Competition, Research: Disease, Research: Environmental Contaminants, Research: Predation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	321	Develop cooperative agreement to secure essential habitat on lands managed by DLNR.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Acquisition: Management Agreement	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	
Oahu tree snails (Achatinella spp.)	1	322	Develop cooperative agreement to secure essential habitat on lands managed by USN	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, United States Navy	Acquisition: Management Agreement	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	
Oahu tree snails (Achatinella spp.)	1	323	Develop cooperative agreement to secure essential habitat on lands managed by USA	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, U.S. Army	Acquisition: Management Agreement	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	
Oahu tree snails (Achatinella spp.)	1	324	Develop cooperative agreement to secure essential habitat on lands managed by USCG	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, United States Coast Guard	Acquisition: Management Agreement	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	
Oahu tree snails (Achatinella spp.)	1	325	Develop cooperative agreement to secure essential habitat on lands managed by HON	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii	Acquisition: Management Agreement	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	

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Oahu tree snails (Achatinella spp.)	1	3261	Conduct management tasks- Northern Ko'olau range: Manage predatory snail	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii, U.S. Army, United States Coast Guard	Management: Habitat Maintenance and Manipulation, Management: Predator and Competitor Control	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3262	Conduct management tasks- Northern Ko'olau range: Manage predatory rats.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii, U.S. Army, United States Coast Guard	Management: Habitat Maintenance and Manipulation, Management: Predator and Competitor Control	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3263	Conduct management tasks- Northern Ko'olau range: Manage alien vertebrates.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii, U.S. Army, United States Coast Guard	Management: Habitat Maintenance and Manipulation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3264	Conduct management tasks- Northern Ko'olau range: Remove alien plants.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii, U.S. Army, United States Coast Guard	Management: Habitat Maintenance and Manipulation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3265	Conduct management tasks- Northern Ko'olau range: Monitor population.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	

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Oahu tree snails (Achatinella spp.)	1	3271	Conduct management tasks- Southern Ko'olau range: Manage predatory snail.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii	Management: Predator and Competitor Control	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3272	Conduct management tasks- Southern Ko'olau range: Manage predatory rats.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii	Management: Predator and Competitor Control	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3273	Conduct management tasks- Southern Ko'olau range: Manage alien vertebrates.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii	Management: Habitat Maintenance and Manipulation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3274	Conduct management tasks- Southern Ko'olau range: Remove alien plants.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii	Management: Habitat Maintenance and Manipulation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3275	Conduct management tasks- Southern Ko'olau range: Monitor Population.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3281	Conduct management tasks- Northern Wai'anae range: Manage predatory snail.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, U.S. Army, United States Navy	Management: Predator and Competitor Control	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	

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Oahu tree snails (Achatinella spp.)	1	3282	Conduct management tasks-Northern Wai'anae range: Manage predatory rats.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, U.S. Army, United States Navy	Management: Predator and Competitor Control	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3283	Conduct management tasks-Northern Wai'anae range: Manage alien vertebrates.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, U.S. Army, United States Navy	Management: Habitat Maintenance and Manipulation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3284	Conduct management tasks-Northern Wai'anae range: Remove alien plants.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, U.S. Army, United States Navy	Management: Habitat Maintenance and Manipulation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3285	Conduct management tasks-Northern Wai'anae range: Monitor Population.	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3291	Conduct management tasks-Southern Wai'anae range: Manage predatory snail.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii, U.S. Army, United States Navy	Management: Predator and Competitor Control	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3292	Conduct management tasks-Southern Wai'anae range: Manage predatory rats.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii, U.S. Army, United States Navy	Management: Predator and Competitor Control	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	

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Oahu tree snails (Achatinella spp.)	1	3293	Conduct management tasks- Southern Wai'anāe range: Manage alien vertebrates.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii, U.S. Army, United States Navy	Management: Habitat Maintenance and Manipulation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3294	Conduct management tasks- Southern Wai'anāe range: Remove alien plants.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources, City and County of Honolulu, Hawaii, U.S. Army, United States Navy	Management: Habitat Maintenance and Manipulation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	1	3295	Conduct management tasks- Southern Wai'anāe range: Monitor Population.	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	2	41	Determine demographic parameters.	Partially Complete	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division	Research: Demographic Studies	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	2	42	Identify habitat needed.	Partially Complete	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division	Research: Habitat Requirements	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	3	51	Identify reintroduction sites.	Planned	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division	Research: Reintroduction	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	

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Oahu tree snails (Achatinella spp.)	3	52	Reintroduce snails to field sites.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Management: Reintroduction, Research: Reintroduction	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Oahu tree snails (Achatinella spp.)	3	53	Monitor reestablished colonies.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Hawaii Department of Land and Natural Resources	Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	